Appln. No. 10/619,712 Amdt. dated November 29, 2004 Reply to Office action of September 28, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A cast iron alloy for a cast iron product characterized by high thermal stability, the alloy comprising consisting essentially of, as nonferrous constituents, positive additions of C, Si, Mo, Al, Ni, Zr, wherein C is present in an amount of less than 2.9% by weight 2.5 to 2.8% by weight, the Si content is 4.7 to 5.2% by weight, the Mo content is 0.5 to 0.9% by weight, the Al content is 0.5 to 0.9% by weight, the Al content is 0.5 to 0.9% by weight, and wherein the Zr content is 0.1 to 0.4% by weight.

Claim 2-7 (cancelled):

Claim 8 (original): The cast iron alloy as claimed in claim 1, wherein the graphite fraction is spheroidal graphite.

Claim 9 (original): The cast iron alloy as claimed in claim 1, wherein the graphite fraction is vermicular graphite.

Claim 10 (currently amended): A The cast iron alloy comprising between 2.5 to 2.8 wt.% C, 4.7 to 5.2 wt.% Si, 0.1 to 1.0 wt.% Ni, 0.5 to 0.9 wt.% Mo, 0.5 to 0.9 wt.% Al, 0.1 to 0.4 wt.% Zr, as claimed in claim 1, including Mg and S each up to .05 wt.% max, and balance essentially Fe.

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Claim 11 (original): The cast iron alloy as claimed in claim 1, wherein the cast iron product comes into contact with exhaust gas from an internal combustion engine.

Claim 12 (original): The cast iron alloy as claimed in claim 1, wherein the cast iron product is an exhaust manifold for receiving exhaust gases from an internal combustion engine.

Claim 13 (original): A process for producing the cast iron alloy as claimed in claim 7, wherein the Al and Zr are added as an Al-Zr prealloy immediately before the alloy melt is cast.

Claim 14 (original): A process for producing the cast iron alloy as set forth in claim 13, wherein the temperature of the alloy melt is over 1460°C immediately prior to casting.

Claim 15 (currently amended): In combination, an internal combustion engine and a cast iron product, the cast into product being contacted with exhaust gases from the internal combustion engine, the cast iron product comprises a cast iron alloy comprising consisting essentially of, as nonferrous constituents, positive additions of C, Si, Mo, Al, Ni, Zr, wherein C is present in an amount of less than 2.9% by weight 2.5 to 2.8% by weight, the Si content is 4.7 to 5.2% by weight, the Mo content is 0.5 to 0.9% by weight, the Al content is 0.5 to 0.9% by weight, the Al content is 0.5 to 0.9% by weight, and wherein the Zr content is 0.1 to 0.4% by weight.